[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 46573 7/31/2000]

[Docket No. 99-NM-214-AD; Amendment 39-11835; AD 2000-15-06]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-10 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-10 series airplanes, that requires a general visual inspection of electrical power feeder cables, airplane structure, and insulation blankets at a certain fuselage station to detect chafing and arcing damage, and corrective actions, if necessary; and installation of a standoff and clamp. This amendment is prompted by an incident in which the power feeder cables in the cabin electrical system were found to be chafed and arced against a fuselage frame due to insufficient clearance between the cables and airplane structure. The actions specified by this AD are intended to prevent such chafing and arcing, which could cause smoke and fire in the overhead of the main cabin.

DATES: Effective September 4, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 4, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-10 series airplanes and KC-10A (military) airplanes was published in the **Federal Register** on January 26, 2000 (65 FR 4184). That action proposed to require a general visual inspection of electrical power feeder cables, airplane structure, and insulation blankets at a certain fuselage station to detect chafing and arcing damage, and corrective actions, if necessary; and installation of a standoff and clamp.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for Proposed AD

One commenter supports the proposed AD.

Request to Revise the Applicability

One commenter requests that the effectivity of McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999 (which was referenced in the applicability of the proposed AD as the appropriate source of service information for determining the affected manufacturer's fuselage numbers of the affected airplanes), be revised to exclude freighter airplanes N1852U through N1854U inclusive, and N1859U. The commenter states that the service bulletin is not applicable to freighter airplanes.

The FAA concurs. The cabin power feeder cables at station Y=1099.00, which is the subject area of the identified unsafe condition of this AD, were not installed on McDonnell Douglas Model DC-10 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration, and Model DC-10-10F, -30F (KC-10A and KDC-10 military), and -40F series airplanes. Therefore, the FAA has revised the applicability of the final rule accordingly.

Request to Extend Compliance Time

One commenter requests that the compliance time for accomplishing the general visual inspection be extended from the proposed 6 months to 18 months. The commenter states that the inspection should be accomplished during a heavy maintenance visit to ensure that proper access can be obtained, all discrepancies are identified, and that any on-condition repairs can be performed in the proper maintenance environment.

The FAA does not concur. In developing an appropriate compliance time for this inspection, the FAA considered not only the degree of urgency associated with addressing the subject unsafe condition, but the manufacturer's recommendation as to an appropriate compliance time, the availability of required parts, and the practical aspect of accomplishing the inspection within an interval of time that parallels the normal scheduled maintenance for the majority of affected operators. In light of these items, the FAA has determined that 6 months for compliance is appropriate. However, under the provisions of paragraph (b) of the final rule, the FAA may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

Request to Revise the Work Hours Specified in the Cost Estimate

One commenter requests that the work hour figure specified in the Cost Impact section of the proposed AD be revised from 1 work hour to 5 work hours, which includes 3 hours to gain access, 1 hour to inspect, and 1 hour to install the clamp. The commenter states that the work hours will be even greater than 5 if any on-condition repairs are needed.

The FAA does not concur. The cost impact information, below, describes only the "direct" costs of the specific actions required by this AD. The work hours specified in the AD represent the time necessary to perform only the actions actually required by this AD. The FAA recognizes that, in accomplishing the requirements of any AD, operators may incur "incidental" costs in addition to the "direct" costs. The cost analysis in AD rulemaking actions, however, typically does not include incidental costs, such as the time required to gain access and close up; planning time; or time necessitated by other administrative actions. Because incidental costs may vary significantly from operator to operator, they are almost impossible to calculate.

In addition, the FAA notes that the economic analysis of the AD is limited only to the cost of actions actually required by the rule. It does not consider the costs of "on condition" actions, such as repairing a crack if one is detected during a required inspection ("repair, if necessary"). Such "on-condition" actions would be required to be accomplished -- regardless of AD direction -- in order to correct an unsafe condition identified in an airplane and to ensure operation of that airplane in an airworthy condition, as required by the Federal Aviation Regulations. Therefore, no change to the final rule is necessary.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 160 Model DC-10 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 80 airplanes of U.S. registry will be affected by this AD.

It will take approximately 1 work hour per airplane to accomplish the required inspection, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the inspection required by this AD on U.S. operators is estimated to be $4,800, or $60 per airplane.

It will take approximately 1 work hour per airplane to accomplish the required installation, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the installation required by this AD on U.S. operators is estimated to be $4,800, or $60 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department
of Transportation
Federal Aviation Administration

AD's are posted on the internet at http://av-info.faa.gov

2000-15-06 MCDONNELL DOUGLAS: Amendment 39-11835. Docket 99-NM-214-AD.

Applicability: Model DC-10 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999; certificated in any category; except those airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration, and Model DC-10-10F, -30F (KC-10A and KDC-10 military), and -40F series airplanes.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent arcing of the power feeder cables against the fuselage structure, which could cause smoke and fire in the overhead of the main cabin, accomplish the following:

Inspection

(a) Within 6 months after the effective date of this AD, perform a general visual inspection of the power feeder cables in the cabin electrical system, airplane structure, and insulation blankets at station Y=1099.000 between longerons 9 and 10 (right side) for evidence of chafing and arcing damage, in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Condition 1 Corrective Action

(1) If no chafing or damage to the power feeder cables, structure, or insulation blankets is detected: Prior to further flight, install a standoff and clamp at station Y=1093.000, longeron 10, in accordance with Condition 1 of the Work Instructions of the service bulletin.

Condition 2 Corrective Action

(2) If any chafed power feeder cable is detected, and if no damage to adjacent structure or insulation blankets is detected: Prior to further flight, repair or replace the power feeder cables in the cabin electrical system with new power feeder cables; and install a standoff and clamp at station Y=1093.000, longeron 10, in accordance with Condition 2 of the Work Instructions of the service bulletin.

Condition 3 Corrective Action

(3) If any chafed power feeder cable is detected, and if any damage to the adjacent structure and/or insulation blankets is detected: Prior to further flight, accomplish the actions specified in paragraphs (a)(3)(i), (a)(3)(ii), (a)(3)(iii), and (a)(3)(iv) of this AD, as applicable, in accordance with Condition 3 of the Work Instructions of the service bulletin.

(i) Repair or replace the damaged power feeder cables in the cabin electrical system with new power feeder cables.

(ii) Repair or replace the damaged structure with new structure.

(iii) Repair or replace the damaged insulation blankets with new insulation blankets; however, insulation blankets made of metallized polyethyleneteraphthalate (MPET) may not be used.

(iv) Install a standoff and clamp at station Y=1093.000, longeron 10.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on September 4, 2000.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

Issued in Renton, Washington, on July 19, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.